Important Information About Hard Disk Drives

Contains updates for Power Macintosh G3, Macintosh Server G3, and Macintosh Server G3 with Mac OS X Server computers

Congratulations on purchasing your Power Macintosh G3, Macintosh Server G3, or Macintosh Server G3 with Mac OS X Server. This update contains important information about

- how to maintain, repair, and reinstall some software on an optional 36 gigabyte (GB) hard disk

Note: Do not reinitialize a factory-installed 36 GB hard disk until you read this update.

- how to install or replace internal hard disk drives
- what kinds of devices work with the optional SCSI card installed in some models

The information about installing drives and connecting devices to the optional SCSI card supersedes information contained in the setup manual that came with your computer.

Note: This booklet refers to Ultra2 low voltage differential (LVD) SCSI devices and cards; these are the same as the Wide Ultra2 SCSI devices and cards described in the setup manual that came with the computer.

The instructions for installing drives changed because of alterations made to computer's enclosure and the trays to which drives are attached. The computer now accommodates 1.6 inch (40.6 mm) tall SCSI drives, as well as 1.0 inch (25.4 mm) tall drives.

Reinitializing and Reinstalling Software on a Factory-Installed 36 GB Hard Disk

Follow these instructions if you need to reinitialize your factory-installed 36 GB hard disk drive or reinstall Mac OS 8.5.1 or AppleShare IP 6.1 on it.

Use the Drive Setup 1.7.1 CD to Reinitialize the Disk

All the hard disks installed in your computer at the factory have been properly initialized (or "formatted"). If you want to reinitialize a factory-installed 36 GB disk drive later, you must use the application Drive Setup version 1.7.1. This is the latest version and the only one that now works properly with factory-installed 36 GB drives.

You can find Drive Setup 1.7.1 on the *Drive Setup 1.7.1* CD in the accessory kit that came with your computer. Use the disc to start up your computer and open the application. The disc also contains a Read Me file and Drive Setup Guide, which provide information about using Drive Setup. You can also find more information about Drive Setup 1.7.1 in the Tech Info Library on Apple's World Wide Web site: http://til.info.apple.com/

Reinstalling Mac OS 8.5.1 or AppleShare IP 6.1 on Disk Volumes Larger Than 21 GB

If you want to reinstall Mac OS 8.5.1 or AppleShare IP 6.1 on a factory-installed 36 GB hard disk drive, follow these steps before you reinstall the programs:

1. Use Drive Setup 1.7.1 to reinitialize the 36 GB disk on which you want to install the software. (See the preceding section for more information about Drive Setup 1.7.1.)
2. Create at least one volume (or "partition") smaller than 21 GB when you format the disk.
3. Install Mac OS 8.5.1 or AppleShare IP 6.1 onto a partition smaller than 21 GB.

Note: If you would rather restore your computer's software to the way it was installed at the factory, use the Apple Software Restore application. This application, which you can find on the CD containing system software, erases your hard disk and reinstalls the original software. Before you use the application, see the Read Me file that accompanies it for instructions and other installation options the program provides.

Installing Drives Inside the Computer

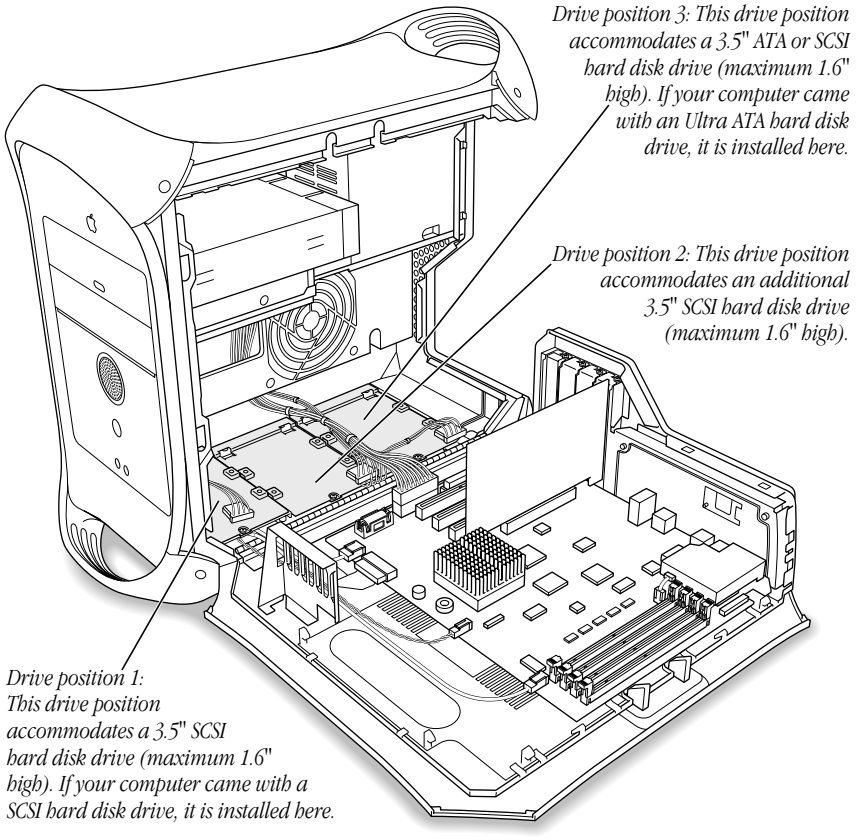
About Internal Storage Options

If you want to add or replace a hard disk drive inside your computer, follow the instructions in this section rather than those in the setup manual that came with your computer.

The computer has three individual, interchangeable lower drive carriers rather than the single drive carrier described in the manual.

Also, you can now install 1.6 inch (40.6 mm) tall SCSI and ATA drives, as well as the 1.0 inch (25.4 mm) tall drives described in the setup manual.

The following illustration shows the location of the lower drive bays.



The number of drives you can install depends on the computer you purchased.

- If you purchased a computer with one Ultra2 LVD SCSI drive, it is located in drive position 1. Drive positions 2 and 3 can each accommodate a Ultra2 LVD SCSI drive.
- If you purchased a computer with two Ultra2 LVD SCSI drives, they are installed in drive positions 1 and 2. Drive position 3 can accommodate a third Ultra2 LVD SCSI drive.

You connect additional internal Ultra2 LVD SCSI devices to the data cable supporting any SCSI drives that came with the computer. This cable has a built-in terminator so you don't need to add one.

- If you purchased a model with an Ultra ATA device, it is located in drive position 3. You can add Ultra2 LVD SCSI drives to drive positions 1 and 2, but you must also install a PCI card and the cable that supports the drives. (See the manual that came with the computer for instructions on installing a PCI card.)

Installing an Internal Storage Device

The instructions here show how to remove the drive carriers from the computer, how to attach a hard disk drive to the carriers, and how to replace the drive and carrier inside the computer. Before you begin, see the setup manual that came with your computer for instructions on

- opening the computer safely
- removing the power and data cables from the main logic board and internal hard disk drives

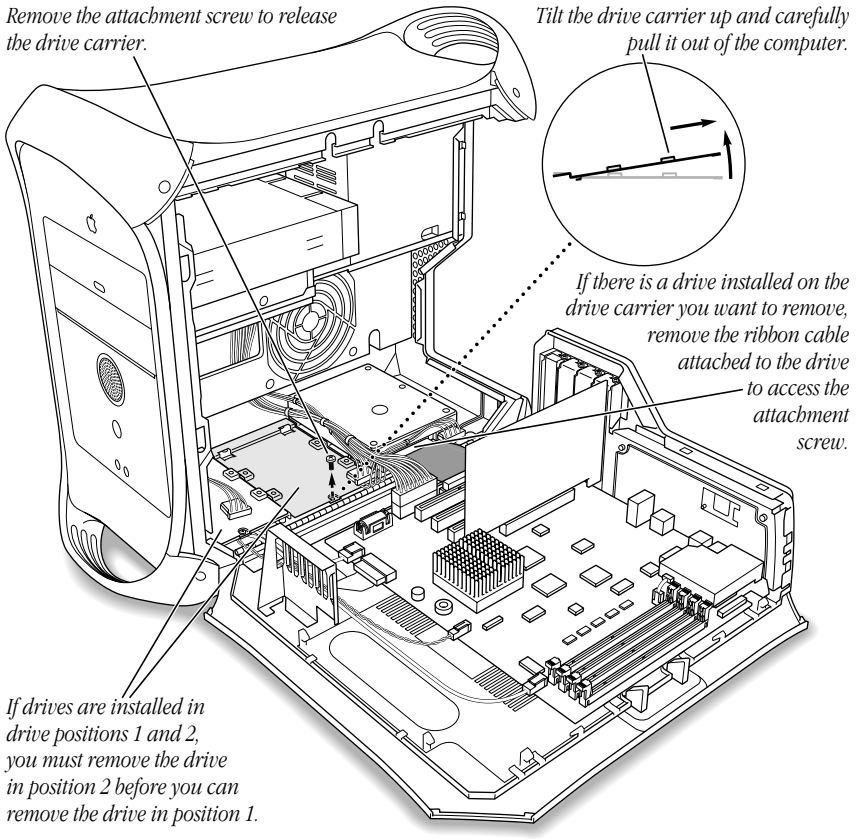
Also see the documentation that came with the drive for instructions on setting the drive's SCSI ID number.

You must assign a SCSI ID number to every additional device and the number must not conflict with an ID number already assigned to a drive on the SCSI chain. If your computer came with one Ultra2 LVD drive, it has ID 0. A second drive has ID 1. A third factory-installed drive has ID 2. The SCSI PCI card has ID 7.

To install a drive:

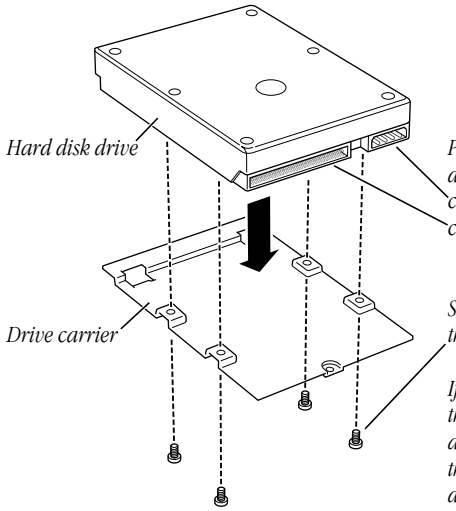
1 Remove the attachment screw that holds the carrier to the computer chassis.

If you're removing a carrier that has a drive attached to it, remove the ribbon cable from the drive to allow access to the attachment screw.



2 Lift the front of the carrier and pull it out of the computer.

3 Attach the hard disk drive to the carrier using screws that come with the drive.

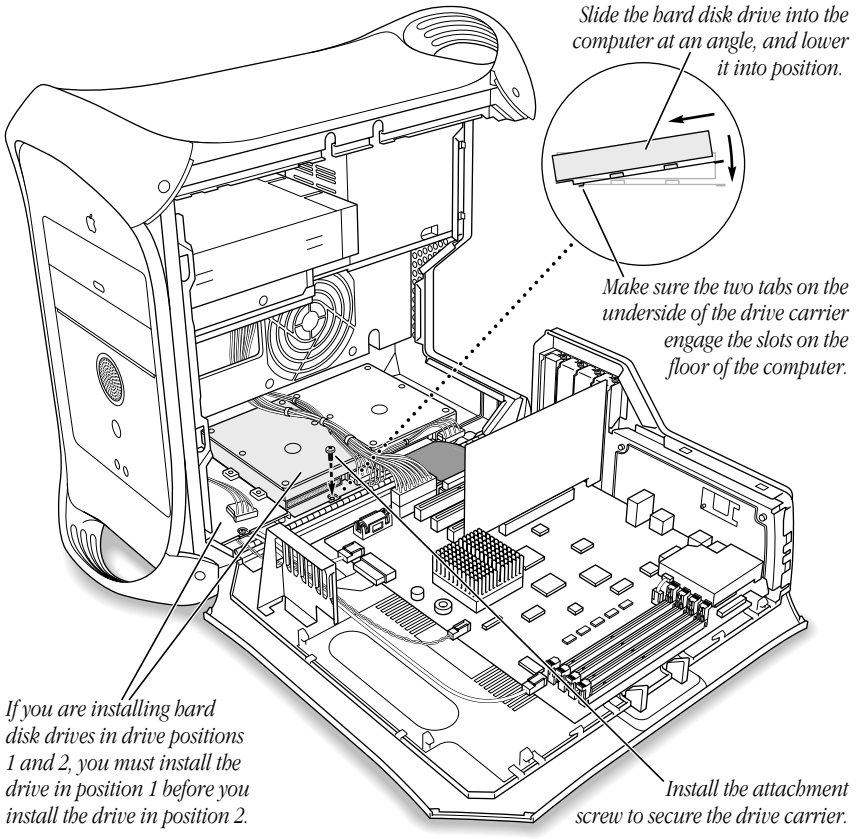


Position the drive on the drive carrier so that the power cord connector and the ribbon cable connector are accessible.

Screw the drive into position with the four screws supplied with it.

If you are installing SCSI drives, make sure that the ribbon cable you attach to them lies across the top of all the drives. You can tape the ribbon cable to the top of the drives with double-stick foam tape to make it lie flat.

4 To replace the carrier and drive, align the tabs on the rear of the carrier with the slots in the computer chassis and slide the carrier in.



5 Reinsert the attachment screw in the carrier.

6 Return to the setup manual for instructions on reconnecting data and power cables to the drives, including connecting a SCSI cable to a PCI card.

After you finish installing drives, return to the manual for instructions on installing other items or closing the computer.

Connecting Devices to the Single-Channel Ultra2 LVD SCSI Card That Came With Your Computer

Some Macintosh computers come with a single-channel Ultra2 LVD SCSI card installed. The setup manual that came with the computer states that you can use other kinds of devices with the card, though performance will not be optimal.

Follow these guidelines for connecting devices to the card, rather than the guidelines in the setup manual:

- Only use Ultra2 LVD SCSI devices.
- Only use devices with drivers compliant with SCSI Manager 4.3.

For more information about using different types of SCSI devices with your computer, see the Tech Info Library at Apple's Web site: http://til.info.apple.com

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